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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/082,518	02/22/2002		L. James Hwang	X-1002 US 5974	
24309	7590	03/24/2004		EXAMINER	
XILINX, INC				WHITMORE, STACY	
ATTN: LEGAL DEPARTMENT 2100 LOGIC DR				ART UNIT	PAPER NUMBER
SAN JOSE, CA 95124				2812	

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/082,518	HWANG ET AL.					
Office Action Summary	Examiner	Art Unit					
	Stacy A Whitmore	2812					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period was period to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 23 January 2004.							
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	action is non-final.						
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) ☐ Claim(s) 1-9 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-9 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or							
Application Papers							
9) ☐ The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>2/22/02</u> is/are: a)□ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the	- ,	, ,					
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	- , , ,	· ·					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Application rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage					
Attachment(s)  1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PT∩.413)					
2) Notice of Praftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da						

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## **FINAL ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

- 2. Claims 1-3, and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartmann (US Patent 6,096,091).
- 3. As for claims 1 and 7, Hartmann disclosed the invention as claimed, including a method (and machine readable storage having instruction thereon for implementing the method) for customization of a Fpga-based SoC []col. 4, lines 7-12], the method comprising:

selecting a system component used for customizing the Fpga -based SoC [col. 4, lines 57-67; fig. 2, elements 110 are system components of elemnt 110 – integrated circuit]; configuring said selected system component with parameters for use with the Fpga - based SoC [col. 4, lines 7-12, 57-67];

propagating said parameters used to configure said selected system component to peer system components [col. 4, lines 23-28, 34-40; col. 5, lines 28-51; fig. 2 elements 110, and 120; cited portions of cols. 4 and 5 show that the system components 110 of fig. 2 propagate configurations to the next element 110]; and

configuring said peer system components using said propagated parameters during customization of the Fpga-based SoC [col. 5, lines 28-43, col. 4, lines 23-28, 34-40; col. 5, lines 28-51; fig. 2 elements 110, and 120; cited portions of cols. 4 and 5 show that the system components 110 of fig. 2 propagate configurations to the next element 110; the peer system components are the elements 110 of fig. 2 which are customized by the configurations].

4. As for claims 2 and 8, Hartmann further disclosed configuring the selected system component with parameters used to configure said peer system component [col. 5, lines 28-43].

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5. As for claims 3 and 9, Hartmann further disclosed propagating said parameter used to configure said peer system component to subsequently selected system components used to configure the Fpga -based SoC [col. 5, lines 28-43].

6. As for claim 6, Hartmann further disclosed wherein the method further comprises the step of initializing only the selected system components that are utilized for customizing the FPGA-based SoC [col. 4, lines 23-28].

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over (Hartmann (US Patent 6,096,091) in view of Cooke et al. (US Patent 5,970,254).
- 8. As for claims 4 and 5, Hartmann disclosed the invention substantially as claimed, including the method of customizing an FPGA-based SoC, as cited in the rejection of claim 1 above.

Hartmann did not specifically disclose wherein said selecting step further comprises [claim 4] the step of providing an option for selecting an implementation selected from the group consisting of a hardware implementation and a software implementation, and

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[claim 5] The method according Lo claim 1, wherein said step of selecting said system component further comprises selecting a system component from the group consisting of a hardware core and a software core.

Cooke disclosed selection of software and hardware implementations within an FPGA design system [col. 2, lines 1-12].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the disclosures of Hartmann and Cooke because adding the selection of hardware and software implementations into the Hartmann system would have improve Hartmann's system by providing customers with the advantages of both software and hardware solutions [see Cooke, col. 2, lines 1-12].

Applicant's arguments filed 1/23/2004 have been fully considered but they are not persuasive.

In the remarks section of the amendment, applicant argues in substance:

A: Hartman nor the combination of Hartman and Cooke do not disclose selecting and configuring system components with parameters used to configure peer system components and propagating parameters to the peer components to configure the peer components.

Examiner respectfully disagrees for the following reasons:

As to point A: Hartman discloses selecting and configuring system components with parameters used to configure peer system components and propagating parameters to the peer components to configure the peer components [col. 4, lines 57-67; fig. 2, elements 110 are system components of element 110 – integrated circuit];

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configuring said selected system component with parameters for use with the Fpga - based SoC [col. 4, lines 7-12, 57-67; col. 5, lines 28-43, col. 4, lines 23-28, 34-40; col. 5, lines 28-51; fig. 2 elements 110, and 120; cited portions of cols. 4 and 5 show that the system components 110 of fig. 2 propagate configurations to the next element 110; the peer system components (FPGAs that are part of an integrated circuit - SoC) are the elements 110 of fig. 2 which are customized by the configurations]

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stacy A Whitmore whose telephone number is (571) 272-1685. The examiner can normally be reached on Monday-Thursday, alternate Friday 6:30am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling can be reached on (571) 272-1679. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stacy A Whitmore

Primary Examiner

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SAW